



Green Energy Biofuel Uses DERA Grant to Reduce Petroleum Use and Facilitate Biodiesel Production

In 2019, Green Energy Biofuel was awarded a \$22,500 Diesel Emissions Reduction Act (DERA) grant to help replace one vacuum truck used to collect and haul used cooking oil. In addition to reducing diesel emissions and improving air quality in South Carolina, the new truck reduces petroleum use and facilitates biodiesel production in the state.



Diesel Emissions Reduction Act (DERA) Grant Program

Each year, the South Carolina Department of Health and Environmental Control (DHEC) receives an allocation from the US Environmental Protection Agency to fund the state DERA program.

DERA grants are awarded to eligible applicants whose proposed projects utilize cost-effective strategies to reduce diesel emissions through engine repowers, equipment and exhaust retrofits, or equipment replacements. Eligible organizations include county, city or other local government entities, private businesses, nonprofit organizations, and colleges or universities. DHEC funds between 25 percent and 100 percent of project costs, depending on the type of project.

The Project

Green Energy Biofuel was one of four companies to receive funding in 2019. Based in Winnsboro, SC, the company was able to replace one model year 2000 Chevy truck with a new model year 2020 Kenworth truck. The custom-built vacuum truck services customers in South Carolina, North Carolina, Georgia, and Tennessee. The vacuum truck is used for used cooking oil collection, which is a sustainable way to obtain the raw materials needed for biodiesel production.

At a Glance

- Green Energy Biofuel received a \$22,500 grant to replace one vacuum truck.
- The new truck decreases diesel consumption by 3,800 gallons per year.
- Used cooking oil is collected by the company and used to make biodiesel.
- More information on DERA grants is available at [scdhec.gov](https://www.scdhec.gov).





Petroleum and Emissions Reductions

Although the new truck still runs on conventional diesel, increased efficiencies decrease Green Energy Biofuel’s diesel consumption by 35.8 percent annually— or 3,800 gallons per year. This leads to a vehicle-lifetime reduction of diesel fuel consumption of 19,000 gallons. Additionally, nitrous oxide (NO_x) emissions are reduced by 93 percent and particulate matter (PM2.5) is reduced by 98.3 percent.

	NO _x	PM2.5	Petroleum (gallons)
ANNUAL	0.655	0.045	3,800
LIFETIME	3.274	0.224	19,000

About Green Energy Biofuel

Founded in 2008, Green Energy Biofuel strives to efficiently upcycle numerous waste streams in a socially conscious manner. Originally operating out of its Winnsboro, SC plant, Green Energy Biofuel has grown to three locations in two states. The company has the capacity to process 30 tanker loads or 200,000 gallons of used cooking oil each day. This used cooking oil is then shipped to biodiesel plants across the Southeast to be refined into biodiesel for use as an alternative to diesel fuel.



“Having a new and reliable truck made a huge difference for our operations and customer service. Knowing that the truck will not breakdown and be in the shop for weeks— often with repetitive large expenses and towing costs— means we retain staff longer and keep our customers happy. While it is a huge expense to purchase a new truck, the DERA grant made it easier. We are happy to see not only a reduction in air pollution and fuel use but also a significant reduction in expenses to keep trucks on the road. We intend on replacing more trucks in the future to further improve our business.”



Erika Coman
Organizational Change Manager
Green Energy Biofuel